

**Kobo's New
Literary Aura**

**Give Me A Break:
Android 4.4 KitKat**

**Microsoft Crosses
the Finnish Line**

DISTRO

090613 #106

engadget[®]

IFA

2013

**Smartphones, Smartwatches,
Adaptable Ultrabooks and the
Best of the Rest from Germany's
Annual Tech Show**



SMARTPHONES



**LAPTOPS &
ULTRABOOKS**



**TABLETS,
SUPER-SIZED SLATES
& E-READERS**



**CAMERAS, ACTION
CAMS & MORE**



**WEARABLE
TECH**



TAP TO CONTINUE.

ISSUE 106

DISTRO

09.06.13

TABLE OF CONTENTS

ENTER

EL

EDITOR'S LETTER

Summer? What
Summer?

By Marc Pertont

IN

INBOX

Color
Quandaries,
Brain Hackers
and Microsoft's
Master Plan



EYES-ON
Misfit Shine

WS

WEEKLY STAT

Microsoft
Crosses the
Finnish Line

By Mat Smith

RR

RECOMMENDED READING

The Strange Story
of Skype

By Donald
Melanson

FORUM

SO MW

SWITCHED ON

More Wedge, Less Edge, No Hedge

By Ross Rubin

THIS IS THE MODEM WORLD

Cooking is Good for Nerds

By Joshua Fruhlinger

REVIEWS

Lenovo
IdeaTab
A1000
By Melissa
Grey

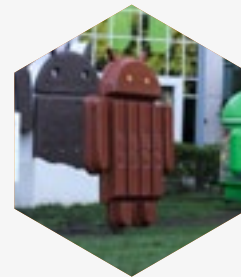
Kobo
Aura
By Brian
Heater

FEATURES

The Best (and the Rest)
of IFA 2013

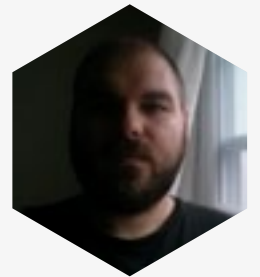


ESC



VISUALIZED

Four Bars of
Android OS



Q&A

Author and
Screenwriter
Philip Gelatt

IRL

IRL

JBL PlayUp Speaker
and BlackBerry Q5
on Telus



REHASHED

Tiny Tech,
Branding
Ubiquity and
a Sweet Deal

TM

TIME MACHINES

Getting Up
To Speed



SUMMER? WHAT SUMMER?

DISTRO
09.06.13

EDITOR'S
LETTER



IN THE US, Labor Day traditionally marks the end of the lazy days of summer, and the beginning of the busy fall season. While this summer was hardly quiet — it included, you might recall, major product launches from the likes of Motorola, Google, LG, HTC and others — the fall started with a bang, with Microsoft's surprise announcement on Labor Day that it was buying Nokia's devices and services division for \$7 billion. The deal gets Microsoft a guaranteed hardware partner for Windows Phone, and quite possibly a new CEO, as the company has all but admitted that Nokia's Stephen Elop is first in line to replace outgoing CEO Steve Ballmer. It might also be considered a bargain. Just two years ago, Google paid over \$12 billion for Motorola; that same year, Microsoft made another expensive telecom acquisition: it bought Skype for \$8.5 billion.

Before we even had time to digest Microsoft's news, Apple announced — somewhat anticlimactically — that it would indeed have a major event next

week, where the company is expected to launch an upgraded iPhone 5, as well as a lower-end model, along with lots of new colors. Meanwhile, Ama-




“The fall started with a bang, with Microsoft’s surprise announcement that it was buying Nokia’s devices and services division for \$7 billion.”

zon announced an upgraded version of the Kindle Paperwhite e-book reader, and Google’s Android KitKat became the first operating system with a name licensed from a candy company. And this was all before the week’s real news started rolling in from IFA.

If you’re not familiar with it, IFA is Europe’s largest consumer electronics show, with as many as 200,000 attendees packing the Messe Berlin exhibition center. This week’s Distro features some of the more interesting products our team saw there, including Samsung’s Galaxy Note 3 smartphone (we refuse to call it a “phablet”), Galaxy Gear smartwatch and updated Galaxy Note 10.1 tablet; Sony’s Xperia Z1 smartphone; and Lenovo’s Yoga 2 Pro

laptop. For more, be sure to check out our IFA hub (at Engadget.com), which includes dozens of posts about all of the major products we saw in Berlin, archived liveblogs from the week’s key launches and hands-on videos of some gear that may not make it to the US for months, if ever.

Google’s KitKat (aka Android 4.4), while not necessarily the week’s biggest news, may well be the most unique. While we’ve seen candy companies go after the tech crowd before (anyone remember Reese’s Mini Peanut Butter Cups’ CES launch a couple of years back?), the idea of tying a candy brand to an operating system seems a bit far-fetched. Nevertheless, the non-cash deal, which merges Google’s dessert-themed naming scheme with Nestle’s marketing might, will result in a worldwide promotion with 50 million candy bar wrappers featuring Google’s robot mascot, and a contest with prizes that will include Nexus 7 tablets and Google Play credits. Be sure to check out Distro’s look at the sweet deal, and let us know what you think Google’s next sugar-laden code name will be (remember, they’re in alphabetical order; we’re betting on Lemon Meringue Pie, given that KitKat took Key Lime’s slot). 



MARC PERTON
EXECUTIVE EDITOR,
ENGADGET



COLOR QUANDARIES, BRAIN HACKERS AND MICROSOFT'S MASTER PLAN



Touch article names
to read full threads

DISTRO
09.06.13

INBOX



THE ONCE-BRIGHT FUTURE
OF COLOR E-PAPER
ISSUE 105,
AUGUST 30TH, 2013

“I love love love the Paper-white! It’s pretty much the perfect e-reading device for me. I don’t really think I’d care for a color e-reader... but seriously, who am I kidding? I’m sure I’d pick one up the moment they shipped.”

— DAVELY

“I had a color e-ink reader for a while and the colors were very, very dull but

COLOR COMMENTARY
ISSUE 105,
AUGUST 30TH, 2013

“I suppose it would be nice, but I just don’t see that much of a demand for color e-book readers. People buying color devices seem to prefer more functionality (tablets), and are willing to give up battery life and readability in sunlight. Sure, those two things are great for people reading color books (magazines, textbooks) the way that people read regular books (that is to say, sometimes outside and for long periods of time), but I think the population of the former is much smaller than that of the latter, at least when talking about digital and not print. I myself don’t own an e-reader — I get by with my phone, though with obvious battery life compromises — but I sometimes think about getting an e-reader. I do read the occasional textbook or magazine, but never for such long stretches that I think to myself that I’d like a color e-reader. I admit, if such a product did exist (color Kindle for example), I would be tempted — but the price would have to be not too much more than the black-and-white version.”

— TERRENCENEWTON



still nicer than just plain black-and-white. Unfortunately the rest of the e-reader was pretty terrible when compared to say, the Kindle, so I didn't stick with it for long. I'd be curious if the colors were much better with a Paper-white-type screen though, as they were noticeably better in sunlight."

— **LOSTBOYNZ**

MOTOROLA DROID ULTRA
ISSUE 105,
AUGUST 30TH, 2013

"I think the reason the Droid Ultra exists primarily is to fulfill a contract with Verizon. The Droid X is the 'Motorola' phone that the company will be pushing to attract larger market share. Not so surprising that the specs for both of them are similar as it keeps things simpler."

— **MAT7777**

"The bigger question is why Verizon is getting the X when it has the Ultra; the X is for every other carrier."

— **ZPE**

THE SMARTWATCH
MICROSOFT NEEDED
YESTERDAY
ISSUE 105,
AUGUST 30TH, 2013

"I can't believe that people still lack the foresight to see what MS is trying to accomplish here. When [the] beta version of Metro UI was rolled out to Xbox about two years ago following the reveal of WP7 and ultimately Windows 8, it became clear as day (at least for me) where MS wants to take us. Uniform UI across all platforms translates into wonderful seamless user experience. MS got it right, unlike their immediate competitors.

What they failed to do was to educate the consumer [on] how to differentiate their products and what each of them can accomplish. As a result people bought RT tablets only to realize that RT is not a replacement for a desktop computer despite [the] similar UI, and the blame for confusion and dissat-

isfaction lies squarely on Microsoft. I hope they'll figure out how to differentiate RT and W8 without hurting either product."

— **SLAPYOMOMMA**

"I am getting old, I can't read those articles on my watch even with my prescription glasses."

— **SAWADEE**

"Microsoft has had a reputation these past 5 years, for being fashionably late to the pain of the stockholders!"

— **LOWIQ**

THE BRAIN MODEM IS HERE
ISSUE 105,
AUGUST 30TH, 2013

"I thought what you did there."

— **OFLIFE**

"Yeah, this doesn't have the potential to be hacked at all does it? No thanks, I don't need someone hacking my brain and then controlling me for their nefarious purposes."

— **CHRISSCOTT2**



ENTER

DISTRO
09.06.13

EYES-ON

MISFIT
SHINE

Tap for detail

TINY
DANCER

IN
SYNC

BAND
TOGETHER

DIMINUTIVE ACTIVITY MONITORING

The folks at Misfit Wearables have labeled the Shine “the world’s most elegant physical activity monitor.” While we’re not quite ready to call the match in favor of this gadget, we agree that it’s quite the dashing piece of tech. The unit’s silver anodized shell encases a three-axis accelerometer and a dozen LEDs with waterproofing up to 150 feet and a battery that keeps ticking well into next quarter.

THE DAMAGE: \$120



ENTER

DISTRO
09.06.13

EYES-ON

MISFIT
SHINE



BAND TOGETHER

To fit any number of activities or preferences, Shine can be worn on the wrist, around the neck or simply clipped onto that hoodie that's going out on the town.

PHOTOGRAPHS BY WILL LIPMAN



ENTER

DISTRO
09.06.13

EYES-ON

MISFIT
SHINE



IN SYNC

Tallying up info via the iOS companion app is a breeze. Placing the tracker on an iPhone's screen is all the light lifting you'll need to do thanks to Bluetooth connectivity.

PHOTOGRAPHS BY WILL LIPMAN



ENTER

DISTRO
09.06.13

EYES-ON

MISFIT
SHINE



TINY DANCER

Whether it's running, swimming, cycling or even sleeping, Shine tracks stats and trends in a thin, metallic-hued shell equipped with LEDs on the top to display the time of day.

PHOTOGRAPHS BY WILL LIPMAN



Microsoft Crosses the Finnish Line

It's official, Microsoft *will* purchase “substantially” all of Nokia’s device and service arms as well as license the phone maker’s patents and mapping know-how. The Redmond company will pay Nokia a cool 3.79 billion euros (\$4.99 billion) for the business, and 1.65 billion euros (\$2.18 billion) for its patent armory. According to the companies’ press releases, 32,000 people will transfer to Microsoft, including 4,700 people in Finland and 18,300 employees directly involved in product manufacture. If you thought it was only the Windows Phone component of the phone business, you’d be wrong: Microsoft will also take into ownership Nokia’s Asha range of feature phones. Patent-wise, Microsoft gets a 10-year non-exclusive license to its Finnish partner’s library of ideas and grants “reciprocal rights” to use Microsoft patents within Nokia’s Here mapping services. While Microsoft will be able to use the Nokia branding, the Finnish company will now focus on its mapping, infrastructure and advanced tech arms. — *Mat Smith*

MICROSOFT WILL PAY:

BUSINESSES	PATENTS	TOTAL
€3.79B	€1.65B	€5.44B
(~\$5B)	(~\$2.2B)	(~\$7.2B)

NOKIA'S GLOBAL DEVICE SALES PERFORMANCE:

Smart Devices	Mobile Phones
7.4M	53.7M
Units sold in Q2 '13	Units sold in Q2 '13

€14.9 Billion

Nokia operations transferring to Microsoft generated approximately 14.9 billion euros [\$19.6 billion] in 2012.
(Nearly 50% of Nokia's net sales for the year.)

10-YEAR

Nokia grants Microsoft a 10-year license to access its patents.

Microsoft grants reciprocal rights to patents for use in **HERE** services.

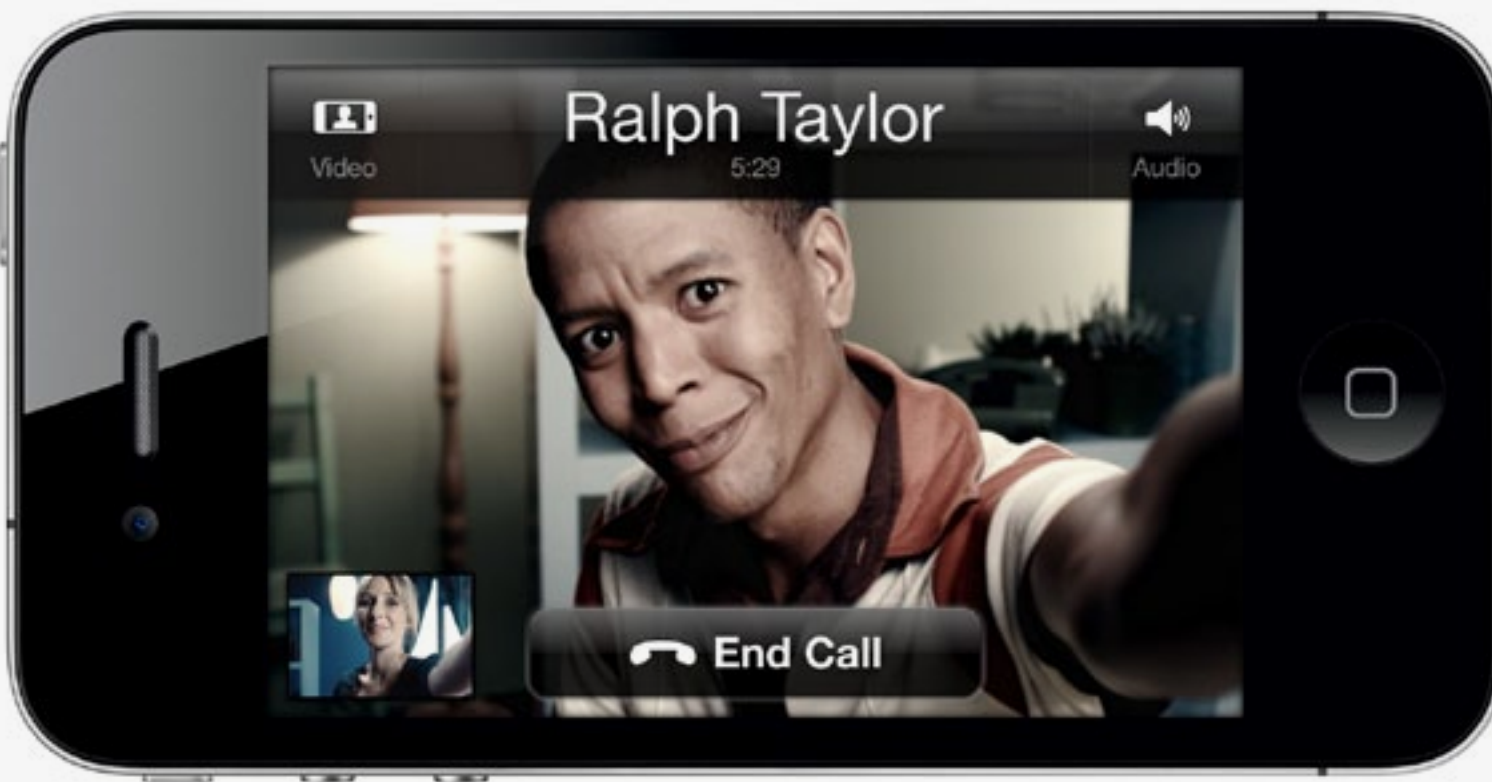
32,000

NOKIA EMPLOYEES EXPECTED TO TRANSFER TO MICROSOFT INCLUDING:

4,700 based
at locations
in Finland.

18,300 in global
manufacturing
positions.





Click on
headlines
to read full
stories

“How Can They Be So Good?”: The Strange Story of Skype

By Toivo Tänavsuu, *Ars Technica*

The big news out of Microsoft this week was its acquisition of Nokia's devices business, but it wasn't all that long ago that it snapped up another company in a multi-billion dollar deal (indeed, for more than it spent on Nokia). In this piece for *Ars Technica* (originally pub-

lished in Estonia's *Eesti Ekspress*), Toivo Tänavsuu takes a look back at Skype's first 10 years, from its founders' first big success with the Kazaa file-sharing services, to the origin of the Skype name itself, to the company's first sale to eBay and the series of events that led to Microsoft stepping in six years later.

Googling Yourself Takes on a Whole New Meaning

By Clive Thompson

The New York Times Magazine

The latest in a line of in-depth looks at Google Glass, this one from Clive Thompson for *The New York Times Magazine* examines both his own experience wearing and using the device, and its place in the history of wearable devices. In doing so, he talks to wearable computing pioneers like Thad Starner and Steve Mann, and those now working with Glass (both inside and outside of Google).

The Insane and Exciting Future of the Bionic Body

By Geoff Brumfiel

Smithsonian

Geoff Brumfiel surveys the state of prosthetics and bionic limbs in this piece for *Smithsonian* magazine, including recent developments that have led to more lifelike artificial hands and a direct link to the human brain. As he explains, there also remain plenty of challenges, like the body's tendency to reject artificial devices, and the enormous financial cost to the people that need them.

Technology Isn't Bad For Us, But Facebook Might Be

By Navneet Alang

Hazlitt

It's unlikely that we'll see an end to the argument that technology or the internet is / isn't bad for us anytime soon, but Navneet Alang suggests those arguments could at least be a bit more nuanced. As he explains in this piece for *Hazlitt*, technology "isn't inherently anything," but some of the companies shaping it are doing so in ways that can give genuine cause for resistance.



MORE WEDGE, LESS EDGE, NO HEDGE



DISTRO
09.06.13

FORUM

SWITCHED
ON

BY ROSS RUBIN

CASTING ASIDE such permutations as the DSi and the DSi XL, it makes ordinal sense for the Nintendo 3DS to have followed the Nintendo DS. This is true even if the “3” was for the number of dimensions and not necessarily generations (in which case it might have been named the DS 3). But it seems a bit puzzling on the face of it to come out with a product called the 2DS after the 3DS. Changing the sub-brand immediately calls the notion of compatibility into question even if one can see why Nintendo wouldn’t want to include “3D” in a product that doesn’t display it. (At least it’s not being called “the new 3DS.”)

And that’s but one of the confusing things about the 2DS, in which the strongest champion of hand-held gaming hardware has eliminated the signature feature of its latest portable console generation as well as the clamshell design with which the DS series has been identified since its debut a decade ago. The result is a makeover of the portable 3D handheld that is a bit less

portable and a lot less 3D.

Given that, a more accurate description of the 2DS would be a “make-under” of the 3DS designed to hit the lower price point of \$129. Introducing a lower-end product at a cheaper price rarely requires any justification beyond making the product more attractive to less-affluent consumers, which the 2DS will do even as it misses that “magic”




“Nintendo hasn’t just made odd combinations work; it made the hand-held gaming market itself work. The 2DS is a chip off the old (hinged) block.”

\$99 price point. Nintendo did offer a further justification, though, bringing the starting point of the product’s recommended age range down a year or two. As a result, the product’s form factor — a thin wedge — sacrifices some portability for ease of access and durability (even though the screens are now exposed, as with modern smartphones and tablets).

The stronger resemblance to those slabs may have competitive undertones. Nintendo has exhibited a Disney-like capability to keep its character stable fresh. However, a glut of inexpensive An-

droid tablets such as the ASUS MeMO Pad HD 7 and Hisense Sero 7 Pro, as well as the more educationally high-minded (and bilingual) OLPC XO Tablet, stand to cut off kids’ early exposure to Nintendo’s franchises. Other competitors that are tempting weary parents include hand-me-down or borrowed smartphones. Regardless of screen size or operating system, though, you won’t find Nintendo games on these devices, and so it’s imperative for Nintendo to get a device in front of kids to establish recognition in the company’s native medium. No amount of merchandise or cartoons can really substitute for that.

At least for many parents, the 2DS has a few advantages over such products. There’s no (explicit) advertising and little risk of stalking or access to inappropriate materials. Without 3D, though, the 2DS must rely on a different sort of depth in its gameplay to ultimately win over parents. That may be a hard sell when a free copy of *Candy Crush Saga* is a click away.

A longtime supporter of 3D, styli, resistive screens and dual screens, Nintendo hasn’t just made odd combinations of technologies work; it has also made the hand-held gaming market itself work. The 2DS is a chip off the old (hinged) block. It will help keep Nintendo’s world exposed to younger consumers, but will struggle to distract consumer attention from cheap and powerful convergent devices in the larger, budget-conscious mobile gaming market. 



COOKING IS GOOD FOR NERDS



DISTRO
09.06.13

FORUM

THIS IS THE
MODEM WORLD

BY JOSHUA FRUHLINGER

Let's over-generalize the nerd archetype for a moment: unhealthy, eats fast food, drinks sugary sodas, sits on his (or her) butt playing video games, a misanthrope with nothing better to do than troll Reddit and pirate some leet warez. Antisocial, anti-nature, probably works in IT while angrily commenting on tech blogs behind the shield of anonymity.

We all know that's not accurate, but there is always truth in the construct others give us. Appease me, won't you?

I'd like to offer something up for those who find themselves stuck in a rut of stereotypical nerdiness: bad health, depression, anxiety, shortness of breath, consumption and / or straight-up boredom: Cook something. Anything.

Start with spaghetti — it doesn't really matter as long as you make fire in the kitchen. It turns out that when you cook, you're using different parts of your brain that will calm you, allow you to make sense of things and even help you make new friends. I have very little scientific evidence of this, but I am sure it's true.

When you cook, you're using real, three-dimensional tools; you're contemplating the end result; you're modulating fire; things might get dangerous; and you're feeding yourself and probably others. Everything we do in technology tries to emulate this what-we-see-is-what-is-happening interface. Mouse pointer, touchscreen, 3D objects — it all adds up.

If you're a programmer, cooking will be surprisingly familiar: You follow a program, put objects of code — ingredients, in this case — together in a particular order and come up with something new and intriguing that will impress those who double-click or bite. The thrill you get from turning bits of code into a working application is two-fold when you affect your senses of taste and smell.

If you're a web designer, cooking will allow you to explore colors in their native state. If you've painted, you know that nature commands the colors we can choose: green peppers contrasted with tomatoes; a swirl of cream in a deep-brown bean paste — art! Mix and match.

If you're a gamer, you know all too well that critical items don't just ap-



“Cooking is everything you love about technology. It’s logical. It’s creative. It’s dangerous. It’s mysterious. It’s really hard.”

pear in treasure chests, and if they do, you’re dealing with some lazy programmers. No, they require knowing what to look for, knowing how to find them and knowing how to put them all together. The grocery store is a place. The recipe is a quest. The result is a victory. The food is a boss fight you win.


Let’s continue with the tools. Many of us spend our days staring at a two-dimensional plane called a monitor. While we interpolate three-dimensional objects from the images we’re seeing, we’re still just staring at a bunch of tiny lightbulbs. I’m not going to say that that’s bad for us, but I am going to say that working with actual tools — knives, ladles, strainers — at about the same distance that we stare at monitors, but in the real world, is good for us. It is said that humans first struck out from the animal crowd when they began using tools and there’s still something to skilling your hand with a knife. If you’ve ever julienned an onion or sliced one into razor-thin discs of flavor, you know what I’m talking about. Simple, human satisfaction. Making cubes out of spheres. The most basic form of creation.

Next we have the recipes. Like computer programs, recipes recite what comes first, what comes second, how

they’re combined and how they should behave. There’s a distinct technology to the ways that ingredients interact with one another: this is alchemy. Boil something too long and it turns into mush. Understand the way a steak needs to rest after cooking lest it turn into jerky. This is science, dudes. This is what we live for. OG Nerd.

Then we have the visceral experience. I once showed my girlfriend — and now wife, possibly due to this event — how to reduce a sauce with red wine. The heat of the pan, the rate of caramelization as it related to reactivating it with more wine, scraping the scrapings, all very logical, but at the same time physical.

The most important part of making a sauce, I told her, was tasting it as it went along. Take a sip. Be in it. Program it. Add code. Add more salt or pepper. Back off on the wine or add more. Maybe drop in some citrus. Be in it. Concentrate. Focus on the fire.

Be a scientist, a caveman and an artist all at once. Cooking is everything you love about technology. It’s logical. It’s creative. It’s dangerous. It’s mysterious. It’s really hard. It’s awesome. And it’ll bring the ladies — or men, what have you. Trust me — you’re meant to cook if you made it this far, nerd. 



**If you can connect to this.
You can connect to us.**

**Reach State Farm[®] 24/7/365
by phone, online or app.**

Learn More ►



REVIEW

CONTENTS

DISTRO
09.06.13



**Lenovo
IdeaTab
A1000**



Kobo Aura



LENOVO IDEATAB A1000



Will Lenovo's
IdeaTab A1000 be
able to trump the
competition with its
audio prowess?
By Melissa Grey

It's not easy being a 7-inch tablet these days. With relatively inexpensive devices like the ASUS MeMO Pad HD 7 and the refreshed Nexus 7 offering a whole lot of bang for your buck, budget tablet makers are facing stiffer competition than ever before. Lenovo hasn't had much luck thus far delivering mobile devices that impress and, indeed, the company's latest offering — the 7-inch IdeaTab A1000 — has its work cut out for it. With the 16GB model priced at \$160 (currently on sale for \$130), the petite IdeaTab prioritizes sound quality over its other functions,



perhaps in the hopes that its above-average performance in that area will woo picky buyers. But does the A1000 have what it takes to compete in a crowded market? Read on to find out.

HARDWARE

The IdeaTab feels remarkably sturdy for a budget device. At 12 ounces, it has a pretty significant heft to it, though we didn't find it too cumbersome to hold. The dimensions — 7.8 x 4.8 x 0.4 inches — make for a device that's easy to hold and guarantees typing will be a comfortable affair. The Lenovo logo is emblazoned on the back in silver, though the effect looks somewhat cheap against the scratch-prone plastic backing. The branding fun doesn't stop there, either.

On the tablet's face, along the bottom edge of the black bezel, you'll find another Lenovo logo. We can't say we're huge fans of its placement there as it disrupts the IdeaTab's otherwise clean lines. And besides, it's not like you need to be constantly reminded that you're holding a Lenovo product in your hands.

The power button is situated on the top of the tablet, toward the right-hand side. As we found in our testing, it has a tendency to be a bit temperamental. To wake the device from sleep, we occasionally had to press the button more than once for it to register. Along the right side, above the volume buttons, lies a covered microSD card slot, which can accommodate up to 32GB of additional mem-

It's a sturdy-feeling tablet with conspicuous branding.



The IdeaTab feels remarkably sturdy for a budget device.

ory, though the little door was a bit frustrating to close once you've popped it open. Flanking the top and bottom of the display are two speaker grilles, the benefits of which we'll discuss later. Lastly, to the upper-left corner of screen is the only camera onboard: a front-facing, 0.3-megapixel shooter.

The top of the device is home to a 3.5mm headphone jack and the micro-USB port. The two are situated a little too close together, so if your headphones have a chunky plug like the Panasonic ones we used, having both the USB cable and the headphones in will be a tight fit. But uncomfortable squeeze aside, you'll be happy to know that USB On-The-Go is enabled, so you can use compatible peripherals like keyboards and flash drives to your heart's content.

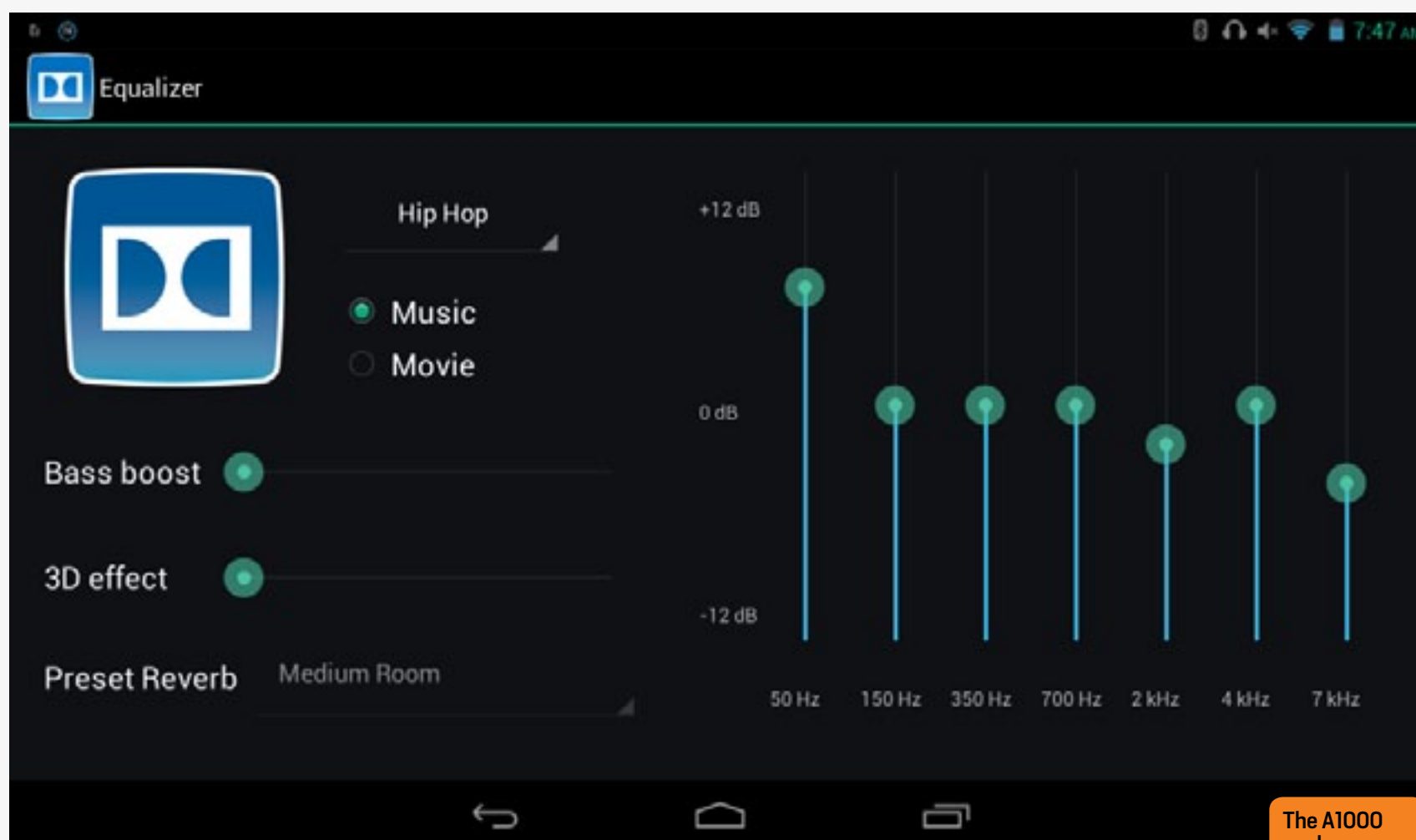
DISPLAY AND SOUND

While we were impressed with the IdeaTab's durability, we can't say the same about the display. It

is, to put it kindly, abysmal. Considering that the device comes with a paltry 1,024 x 600 resolution (that's a pixel density of 170 ppi), we weren't expecting to be blown away by its visuals, but the low pixel count was far from Lenovo's greatest sin. That rather dubious honor goes to the screen's construction. It seems that the LED display is set just a tiny bit too far from the glass, causing a headache-inducing glare. We strongly suspect this also influenced the tablet's severely limited viewing angles. Once the device is angled away from the viewer, it's almost impossible to make out what's on screen. Even looking at it head-on, the colors are significantly washed out; whites never appear truly white, and blacks are, at best, a very dark gray. Dark text on a light background was difficult to read due to the poor resolution as well as

The microSD slot allows you to add up to 32GB of memory.





the inexcusable glare. The combination of elements means that this disappointing display is nearly unusable outdoors during the day.

What the IdeaTab lacks in image quality, it attempts to make up for in the sound department. Though videos may not look their best on the IdeaTab, the front-facing speakers ensure that, at the very least, they sound decent. While it would be folly to expect too much from a tablet in terms of sound reproduction, Lenovo has put in a respectable effort with the A1000's dual speakers. There's some mild distortion at maximum volume (which is impressively loud), but the sound quality is arguably the tablet's strongest selling point.

We put the IdeaTab through its paces with a few different music genres

to see how it performed.

Stravinsky's "The Firebird" (as performed by the Vienna Philharmonic) played well considering our low expectations for a tablet's speakers to be able to handle orchestral works. Regina Spektor's "How" wasn't as lucky, as the piano proved to be difficult for the IdeaTab to handle. And lastly, Pharrell Williams' vocals on Daft Punk's "Get Lucky" weren't too shabby, although the bass was nearly nonexistent.

Plugging in a headset will enable the Dolby Digital Plus equalizer in the settings menu. It's a beefed-up version of the EQ settings you might expect, and it comes with two options: music and movies. The most noticeable effect of the various customizable audio profiles available (you can also design your own

The A1000 packs an equalizer app to maximize audio output.



“user” profile) is an amplification of the bass, which might be useful to you.

SOFTWARE

The A1000 comes with Android 4.1.2, which is, now that 4.3 has rolled out, two versions old, and the company currently has no plans on upgrading. Considering that competitively sized devices are now shipping with Android 4.3 (like the new and improved Nexus 7) or are likely to see an upgrade to it in the near future (like the MeMO Pad HD 7), it's hard to justify purchasing a similarly priced device that's significantly outdated right out of the box.

In terms of modifications to the OS, Lenovo has evidently subscribed to the if-it-ain't-broke-don't-fix-it school of thought. The standard Google set of

apps — Gmail, Chrome, YouTube, etc. — dominates the IdeaTab's software line-up, as is expected. The nearly stock version of Android isn't bogged down with many supplemental bells and whistles, and the additions Lenovo has made don't provide many added bonuses to the Android experience. If you've ever yearned for a scheduled power on and off setting (there must be at least one of you out there), you'll find it on the IdeaTab. Additionally, there are four stock audio profiles to choose from — general, silent, meeting and outdoor — that allow you to easily toggle your device's ringer and vibration settings on the go. ES File Explorer comes preloaded on the device for those of you who want to fiddle with your tablet's files. While it isn't unique

Alas, it seems this tablet will not go past Android 4.1.2.



to the IdeaTab, it's still a useful feature to have.

CAMERA

There's not much to be said about the A1000's camera, as there's only one. The 0.3-megapixel, front-facing camera is nothing to write home about, but it serves its purpose. The picture is, unsurprisingly, pretty grainy, and the colors don't exactly pop off the screen. Outdoors, on a partly cloudy day, the camera performed relatively well considering its modest specs. Indoors, it wasn't nearly as useful, though if you've got bright enough light, it might suffice for very basic video chatting. When snapping pictures, there is a bit of a

delay from when you press the button to when the picture's actually taken, but that's not an uncommon occurrence on Android devices. We suppose the camera will do in a pinch if you're really into subpar selfies.

In the grand scheme of things, the lack of a rear camera is perhaps not the greatest loss (you know how we feel about tablet cameras), but it's a notable omission considering that its nearest competition offers one. The Nexus 7, Hisense's Sero 7 Pro and the ASUS MeMO Pad HD 7 all pack 5-megapixel rear cameras, though only the Sero comes with a flash. While a tablet might not be our first choice for on-the-spot photography, it's always nice to have the option.

PERFORMANCE AND BATTERY LIFE

As you can see from our comparison chart, the IdeaTab consistently lands at the bottom of the pack when it comes to benchmarks. Alongside similarly priced devices, the A1000's modest processor can't quite compete. Still, while benchmark results aren't always indicative of real-world performance, the 1.2GHz MediaTek MT8317 dual-core CPU is every bit as inadequate as the numbers would have you believe.

Everyday use was not without its flaws. The accelerometer often took a few seconds and several shakes to register when the device was tilted, and when it did, it took another handful of sec-



The sole, 0.3MP camera is not great for photos.



BENCHMARKS	LENOVO IDEATAB A1000	ASUS MEMO PAD HD 7	GOOGLE NEXUS 7 (2013)	HISENSE SERO 7 PRO	HP SLATE 7
QUADRANT	3,419	3,393	6,133	4,251	N/A
VELLAMO	1,337	1,460	1,597	1,692	1,426
ANTUTU	7,258	12,723	19,755	12,883	11,698
SUNSPIDER 0.9.1	2,189	1,382	602	1,868	1,848
GFXBENCH 2.5 EGYPT OFFSCREEN (FPS)	2.5	3.7	40	11	12
CF-BENCH	6,342	11,694	15,366	11,322	6,790

SUNSPIDER: LOWER SCORES ARE BETTER

onds for the icons to load properly. When browsing the internet, pages in Chrome were slow to load, even with mobile-optimized sites. Once websites were up and running, zooming in and out was relatively painless, and we encountered little to no tiling for the most part. GIF-heavy sites like Tumblr proved to be too much for the IdeaTab; they were slow-loading at best and crash-inducing at worst. On both mobile and full sites, there was also significant stuttering while scrolling through text.

On the whole, games ran much more smoothly. We tried out *Temple Run 2*, *Candy Crush Saga* and *Tetris*, all of which put in a good show. None of those titles are particularly demanding, so if you're a casual gamer, the IdeaTab is a serviceable option. The only game where we noticed some latency was *Robot Unicorn Attack 2*, though it wasn't

bad enough to hinder gameplay.

With the brightness set at 50 per cent, we played a 1,270 x 720 video on a continuous loop until the battery gave out and died, and the results were nowhere near the most impressive we've seen. The A1000's seven hours and 34 minutes of battery life places it firmly near the bottom of the list in our chart. In the 7-inch budget Android tablet niche, the IdeaTab's numbers are somewhat more respectable. While the 3,500mAh battery's performance isn't the worst we've seen, it's a far cry from the 10 hours of juice you get out of the MeMO Pad HD 7. It was even bested by the HP Slate 7's end result by a whopping two minutes. However, it did outshine the refreshed Nexus 7 by nearly 20 minutes. During everyday use, you'll be able to squeak out a bit more time from the IdeaTab. Depending on how much you rely on your tablet for web



TABLET	BATTERY LIFE
LENOVO IDEATAB A1000	7:34
APPLE iPad MINI	12:43 (WIFI)
APPLE iPad (LATE 2012)	11:08 (WIFI)
APPLE iPad 2	10:26
ASUS EEE PAD TRANSFORMER PRIME	10:17
ASUS MEMOPAD HD 7	9:56
APPLE iPad (2012)	9:52 (HSPA) / 9:37 (LTE)
NEXUS 7 (2012)	9:49
MICROSOFT SURFACE FOR WINDOWS RT	9:36
APPLE iPad	9:33
ASUS TRANSFORMER PRIME INFINITY TF700	9:25
SAMSUNG GALAXY TAB 2 10.1	8:56
SONY XPERIA TABLET Z	8:40
HISENSE SERO 7 PRO	8:28
GALAXY TAB 2 7.0	7:38
HP SLATE 7	7:36
NEXUS 10	7:26
SAMSUNG GALAXY NOTE 8.0	7:18
NEXUS 7 (2013)	7:15
RIM BLACKBERRY PLAYBOOK	7:01
SAMSUNG GALAXY TAB 3 10.1	6:55

browsing, videos, music and social media, you can probably expect something in the ballpark of eight or nine hours with conservative use.

THE COMPETITION

As we mentioned earlier, it's not an easy time to be a 7-inch Android tablet. A low price tag simply isn't enough to wow buyers in a market where they can afford to be picky. The IdeaTab A1000 can't hold a candle to the competition, particularly when it comes to devices like the 2013 Nexus 7. Though the \$160 retail price might catch one's eye, it's still too much for such an underperforming tablet.

While the Nexus 7 is more expensive at \$230 for the 16GB WiFi model, the fact that it comes with Android 4.3, a quad-core 1.5GHz Qualcomm Snapdragon S4 Pro processor and a 1,920 x 1,200 (323 ppi) display should be enough to convince you to save up your hard-earned cash. Likewise, the ASUS MeMO Pad HD 7 blows the IdeaTab out of the water in terms of performance. Considering that the MeMO Pad retails for \$150, it's impossible to justify spending more on an inferior device.

Even devices we've been hard on, like the HP Slate 7 and the Hisense

The IdeaTab A1000 can't hold a candle to the competition.



Sero 7 Pro, outperform the IdeaTab. While the former failed to impress, it still put up a better fight than Lenovo's offering, though we can't say we would suggest buying either product. Hisense's \$150 tablet has a vastly superior 1,280 x 800 display, and while it had its own flaws (like headphone-compatibility issues), the Sero 7 would be a much wiser buy. It's worth noting that all of the devices mentioned in this section come with rear cameras and — with the exception of the Slate 7 — ship with Android 4.2 or 4.3. When compared to the competition, the IdeaTab simply doesn't measure up.

WRAP-UP

The only thing Lenovo's IdeaTab truly has going for it is its emphasis on audio quality, but when all is said and done, that's not enough for us to recommend it. The unforgivably shoddy

display was far worse than we would have expected even at this price. Even if we were able to look beyond that obvious shortcoming, the tablet's poor performance would have been the final nail in its coffin. Browsing the internet was far from pleasant, and we ran into too many problems with apps freezing or crashing. While stuttering might be a fairly common issue in Android tablets, it was especially noticeable with the A1000. Overall, we can't, in good conscience, recommend adding this device to your gadget collection. With heavy hitters like the Nexus 7 and MeMO Pad HD 7 offering far better performance at a similar price, you'd be better off looking elsewhere. **D**

Melissa is an Associate Editor at Engadget who writes novels in her spare time because she believes that having a social life is overrated.

BOTTOMLINE

LENOVO IDEATAB A1000

\$160



PROS

- Sturdy design
- Good sound quality

CONS

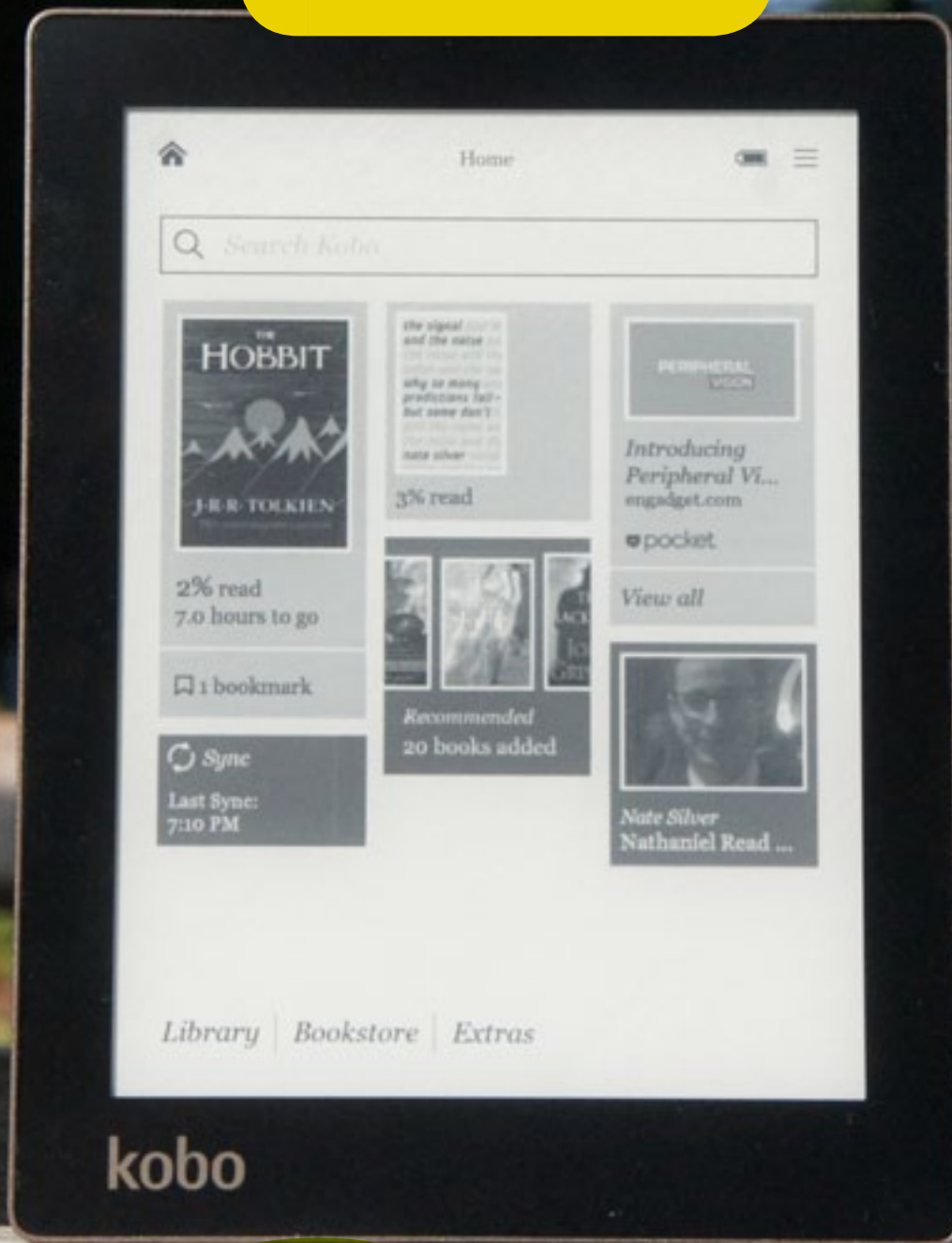
- Subpar display
- Software update unlikely
- Sluggish performance, some hiccups

BOTTOMLINE

With the IdeaTab A1000, Lenovo focused on audio quality, but the device's poor performance and disappointing display are a letdown.



KOBO AURA



Does Kobo's new **Aura** e-reader have enough style and charm to overcome its slightly high price point?
By Brian Heater

Outside the US, Kobo is a major player in the e-reader space. Here in the states, however, mentioning the name will almost certainly elicit baffled stares. In 2011, the company was hit particularly hard when Borders, its main retail partner, shuttered. Since then, Kobo's been attempting to rebuild through networks of independent booksellers. One glaring misstep aside, Kobo has since put out solid devices, ones that could even stand up against what Amazon and Barnes & Noble are selling. Earlier this year, the company took this a step further with the Aura HD, a pricey, high-spec,



7-inch device for hardcore readers. Kobo didn't expect to move many units. The HD now accounts for a quarter of Kobo's e-reader sales. Clearly the company was onto something.

As the successor to last year's Glo, the new Kobo Aura splits the difference between luxury and mainstream, borrowing some elements from the HD and giving them new life in a more affordable 6-inch device. In this case, "more affordable" means \$150 — that's still \$20 more than the Glo and \$30 more than the low-end Paperwhite. The company's also made some updates on the software end, including, notably, the addition of the Pocket reading app. So, do the upgrades justify the asking price?

HARDWARE

This is a seriously nice piece of hardware — and mind you, that's not the kind of compliment we often bestow on e-readers. These devices are, after all, content-delivery vectors more than anything else, not the sort of things you'd covet like a smartphone. To its credit, Kobo bucked the utilitarian trend with the Aura HD, a device that was, by all accounts, intended for the pro-

verbial 1 percent of hardcore readers. The new Aura represents an attempt (albeit a pricey one) to bring that kind of attention to detail to a mainstream device. We happened to have our trusty Kindle Paperwhite lying around (we're in the middle of a Richard Brautigan bio we're having trouble putting down), so let's start with some size comparisons, shall we?

The Aura is compact — the sort of compact that makes everything that preceded it look downright clunky. Even with the same industry-standard, 6-inch screen size, the reader is noticeably smaller than the Kindle, standing 5.9 inches to Amazon's 6.7. It's narrower and thinner, too, thanks in part to a flush

Kobo's finally ditched the diamonds and offers a new texture.





The Kindle Paperwhite alongside its new competition.

bezel. The company was able to strip away the cheap border thanks to the implementation of capacitive touch, which, unlike infra-red, doesn't require a sensor gap above the display. It's quite the novel feature for an e-reader, and it goes a long way in enhancing the overall quality of the device. The bezel itself is thin, with a smaller, subtler Kobo logo tucked into the lower-right-hand corner. You're not going to have any issues holding the Aura, though; its compact size makes it easy to grip.

There are no physical page-turn buttons here, of course — Kobo abandoned that notion a long time ago. We'll continue to champion the Nook line on that

front and just agree to disagree with the company on this one. Along the top of the device is a bright red power switch — not exactly in keeping with the Aura's fairly subtle design, but, well, Kobo habits die hard. Next to this, the company's also held onto the dedicated glow button, so you can turn the front light on and off without fiddling with the settings. On the bottom, you get your standard dose of FCC information, along with a reset hole and slots for micro-USB charging / syncing. There's also a microSD slot so you can augment the industry-standard 4GB of built-in storage. Of course, we're all doing much of our e-book storage in the cloud these days, but we've never been ones to turn



down more local storage.

As for the back, Kobo's, thankfully (*finally*) sunset the diamond-quilted pattern that has long been a staple of the company's design language. Well, that's not entirely true. The diamonds are here; they're just, well, really, really small, forming a textured surface. It's not a bad choice, but we're honestly a bit surprised the company didn't opt for the soft-touch back it used on some of its new tablets. The Aura's also borrowed the crooked lines from its HD predecessor, though they're incorporated in a far subtler manner this time around. Here, the sides of the rear slope downward ever so slightly — a departure from the sharper angles that arguably made the 7-inch model slightly easier to hold.

And how about that screen? Kobo's returned to the 6-inch sweet spot, after flirting with both 5- and 7-inch devices. The company's also backed off from the Aura HD's impressive (in e-reader terms, anyway) 265-pixel-per-inch panel for a more average 212-ppi display. Put it next to the Glo or Paperwhite, and odds are you won't see much of a difference. And, to be perfectly honest, you most likely won't need a



A capacitive touchscreen means a smaller bezel on the Aura.

higher resolution for the vast majority of reading you'll do — unless, of course, you plan on reading a lot of comics or other image-heavy titles. But if that's the case, we'd strongly recommend shopping for a tablet instead.

Kobo tells us that it worked directly with E Ink to eliminate those pesky full-page refreshes, which briefly flicker black every six page turns or so. It's true that the issue has been eliminated here, but, in exchange, we get something more akin to a dissolve, meaning you'll see a really faint grayish dot matrix as the pages transition from one to the next. The turning speed remains largely unchanged, however, thanks to the 1GHz i.MX507 processor inside. But while we appreciated the switch from infrared to capacitive touch from an aesthetic perspective, page turns and button presses don't register as accurately as they once did. In fact, we



found ourselves having to repeat actions several times before they took.

All told, the Aura's hardware isn't perfect, but this is easily the nicest mainstream standalone e-reader we've seen, though the \$150 price tag may be a lot for all but the most devoted bookworms to stomach.

SOFTWARE

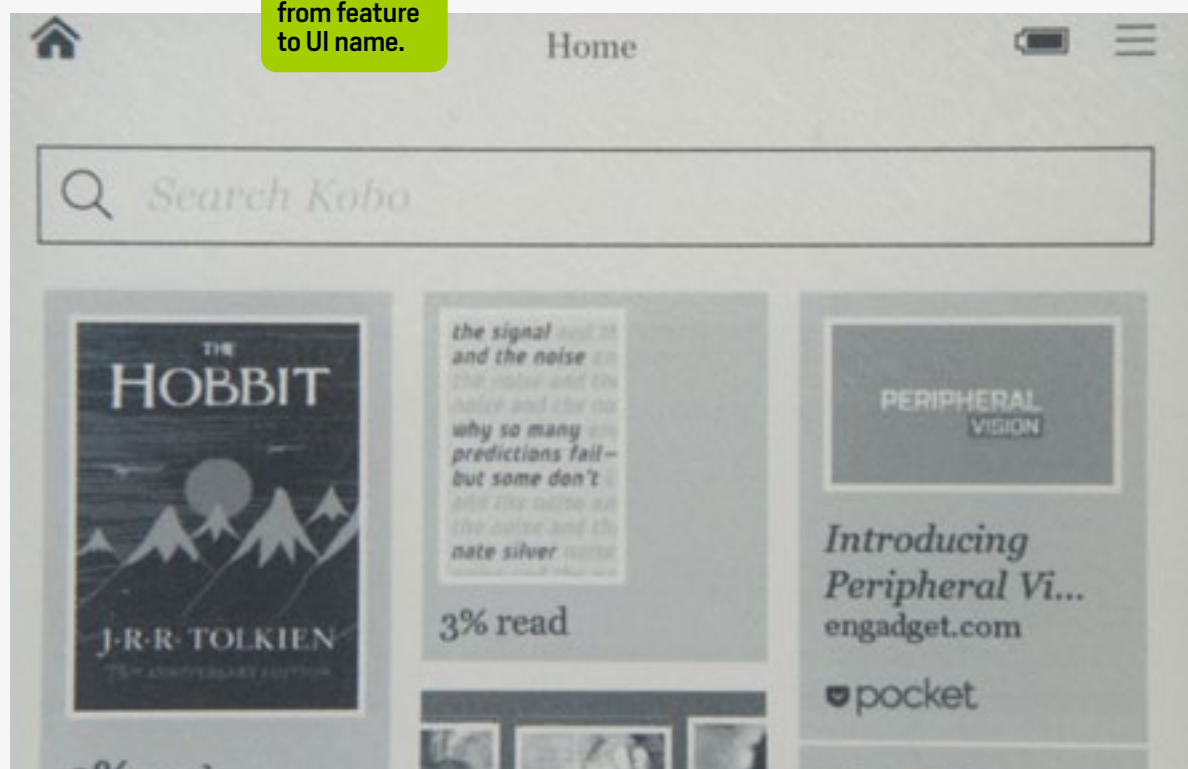
If you've spent any time with a new-ish devoted Kobo reader, you basically know what you're getting yourself into, though there are a few notable tweaks. Most interesting is the fact that Kobo has redefined its Reading Life feature. Whereas Reading Life was once a competitive-reading feature (involving a series of awards and stats, which we never found particularly appealing), it's now the name of the entire UI. What you see when you first pull the reader out of its cover-displaying sleep mode is Reading Life. Confusing? Slightly, maybe, but we got over it pretty quickly and suspect you will as well.

That old concept of Reading Life does still exist here, but it's tucked away under an "Extras" offering at the bottom of the home page. The rest of that home screen is monopolized by little

modules, the largest of which shows what you're currently reading. You see the cover, the percentage read and the amount of time you've got left. There's also a search bar, a quick link to other titles you own and a button that'll sync the reader up.

One key UI addition is Pocket (the app formerly known as Read It Later). Kobo gets big points for being the first e-reader maker to integrate that functionality, beating Kindle to the punch (though Amazon is likely focused on adding GoodReads social purchasing to its own devices). Add something to your Pocket account, sync the Aura and boom, it's right there. We picked an article from a favorite tech site and it worked like a charm. You read through the text of the saved page as you would a book. Get to the end of the article and the reader asks you if you'd like to archive, favorite, delete or return to the full collection of saved Pocket stories.

Kobo has bumped up Reading Life from feature to UI name.



Introducing Peripheral Vision

engadget.com | Brian Heater | 8/29/13

PERIPHERAL
VISION

Pocket offline
clip reader
[top] and
Beyond the
Book results.

Key terms ▾

Page 1 of 2

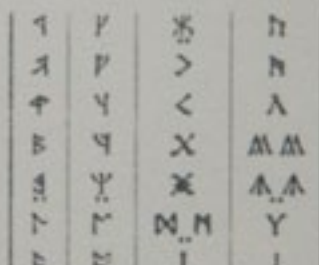
Show: Up to current chapter

Balin is a fictional character in J. R. R. Tolkien's legendariu...

Balin



Bilbo Baggins



Dwarf

Quendi

The settings button at the top of the page has options to manually adjust the front lighting, fiddle with WiFi, check the battery and sync the reader up. Along the bottom, next to the Extras button, are links to the bookstore and your library, the latter of which is broken up into books, previews, collections, Pocket articles and Kobo collections. The library itself is a pretty

straightforward catalog that can be refined by things like the last time you read a book, title, author, file size and file type. Previews is a collection of just that — trial-sized bits of a book that you've downloaded from the store to avoid shelling out money for something you're not into.

Kobo Collections, meanwhile, are yet another method the company has devised to get you to buy more books. This time, recommendations have been grouped into themes like “Around the World in 80 Bites” and “Big Names and Big Ideas of the Digi-

tal Era.” Each features a quick intro followed by book blurbs. We can see some appeal in the concept when the company adds collections from authors and other celebrities, but for now, the Collections are all from Kobo itself and therefore don't offer much that you can't already find in the company's regular recommendations.

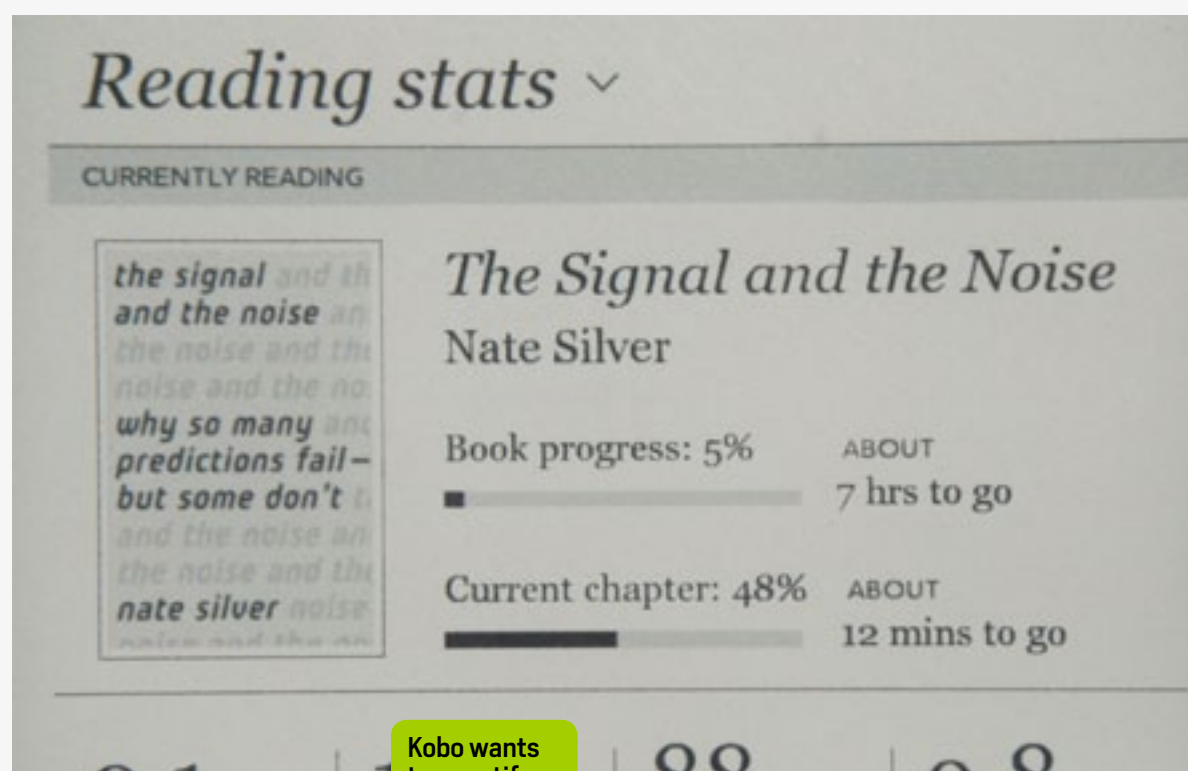
And what of the text itself? Well,



like the rest of the UI, Kobo's continued to focus on simplicity. Aside from the text, the page is mostly clean. Up top, you'll see the book title, with the chapter name and page progress along the bottom. There's also a link to Kobo's new Beyond the Book feature.

Think of this as a sort of equivalent to the Kindle's X-Ray, a way of getting some quick contextual information about what you're reading — that includes terms, characters and anything else the company's "complex algorithm" (don't want to spill the beans on the special sauce, right?) gathers up.

These pages are also accessible through underlined terms in the text. There weren't a ton of them while reading *The Hobbit*, so we didn't find it particularly distracting. Should you click on one of these links, you'll find a page populated by information crawled from online resources like Wikipedia, which will no doubt provide context for particularly complex mythologies like Tolkien's work. Tap the Beyond the Book module in the corner and you get a spread of terms pulled from your progress thus far. The functionality also works offline, with the reader pulling a select number of terms for the book you're reading when it syncs.



Kobo wants to quantify your reading experience and progress.

Tap the top or bottom of the screen while you're reading and you'll get access to more information, including your progress in the current book and links for settings, stats, advancing in the book and fonts. You can also adjust the text size with a pinch. There are 24 font sizes, various weights and sharpness levels and 11 styles, including two intended specifically for dyslexic readers. All in all, there should be plenty of options for those who need their text just perfect. Hold down on the text and a definition pops up. You can also drag out the text for highlighting, searching the rest of the book for the same terms or sharing via Facebook — if you're, you know, the kind of person who likes to share book passages on Facebook.


As for the bookstore, Kobo's got a selection of around 4 million titles. Like its competitors, there are certain titles you're just not going to find — not every-



thing's been digitized yet. Still, there's plenty here for just about every reader, particularly in the new releases category. The store's front page offers up yet another place for recommendations, right in the center, plus more discovery through *New York Times* bestsellers and a list of the top free e-books. Or you can also just go the old-fashioned route and search for what you're looking for via the magnifying glass up top.

Kobo hasn't done much to tweak its UI, but there are some really nice additions here, namely that Pocket integration that has been added to all its new devices. Behind the Book, on the other hand, isn't something we see ourselves using on a regular basis, but should we ever attempt to read, say, *Finnegan's Wake* again, we can certainly see such contextual information coming in handy. Ultimately, though, if you're already locked into the Amazon ecosystem (as so many of us are), there aren't a ton of compelling software reasons to make the switch.

WRAP-UP

The Kobo Aura is the best flagship e-reader on the market. There are, however, some caveats here. First, it's still a hard sell if you're locked into Amazon, as the Paperwhite's recent tweaks have made it all the more compelling a proposition. Second, the \$150 price tag makes the device decidedly not mainstream. Kobo just can't compete with Amazon's subsidized reader prices, particularly not with the Kindle's Special Offers ad model, which shaves even more off the price. If you're already locked into Amazon, it's best to wait it out. If you're a Kobo devotee or someone who has yet to pull the trigger on an e-reader (and don't mind paying for quality), do yourself a favor and take a serious look at the Aura. 

Brian's work has appeared in Spin, The Onion, Entertainment Weekly, The New York Press, PCMag, Laptop, and various other publications.

BOTTOMLINE

KOBO AURA

\$150



PROS

- Great build quality for an e-reader
- Best-in-class frontlighting
- Integration with Pocket

CONS

- Expensive
- Touchscreen can be unresponsive

BOTTOMLINE

Kobo's built a terrific e-reader, but the high price is tough to justify.



THE BEST (AND THE REST) OF IFA 2013

This Year's Biggest Trends and Standout Devices from Europe's Annual Gadget Gathering

While smartwatches and cameras that pair with smartphones and slates are certainly eye-catching, modular Ultrabooks, giant handsets and other tech oddities also nabbed time in the spotlight at IFA this year. A number of heavy hitters rolled out a stable of devices at a rapid pace, so without leaving a single S Pen note unscribbled, we offer you the best (and the rest) straight from the show floor in Germany.

SMARTPHONES

**LAPTOPS,
ULTRABOOKS &
MORE**

**TABLETS,
SUPER-SIZED
SLATES &
E-READERS**

**CAMERAS,
ACTION CAMS
& MORE**

**WEARABLE
TECH**



SMARTPHONES

In addition to the expected announcement of the Note 3, Sony pulled the wraps off of its latest in the Xperia line, while 4K video capture got cozy in a number of mobile devices.



Click on
product
names to
read full
stories

DISTRO

09.06.13

BEST OF IFA 2013

SAMSUNG GALAXY NOTE 3

PRICE: TBD

AVAILABILITY: September 25th

Two years ago, at a consumer electronics show in Berlin, Samsung took to the stage and unveiled the 5.3-inch monstrosity called the Galaxy Note. The same company announced the Galaxy Note 3 this year, the second sequel in a series of supersized stylus-smitten smartphones, which is even taller, narrower and thinner than the first two of its kind. The new 5.7-inch Note

not only utilizes an S Pen, but also enhances its functionality and adds better hardware and components to boot.

The Note 3 has a 5.7-inch, 1080p Super AMOLED panel, giving the user roughly 386 ppi to work with — plenty more than the first two Notes. The biggest departures in Samsung's design are on the back and sides. The back cover (still removable) eschews the previous gen's glossy plastic and replaces it with a matte leather finish. It's more comfortable, offers a better grip and doesn't leave fingerprints. The S Pen is the area in which we saw the most changes.

Pulling the pen out of its hiding place triggers Air Command: a semi-circular menu that pops up and gives you a few quick options: Action Memo, Scrapbook, Screen Write, S Finder and Pen Window. If you find yourself falling for the Gear, the Note 3 is compatible with it, since it runs on Android 4.3. — *Brad Molen and Zach Honig*



SONY XPERIA Z1

PRICE: TBD

AVAILABILITY: TBD

Following the lead of other OEM's, Sony appears to be easing off the fragmented releases, instead training us that Z means business, Z Ultra means bigness and the freshly announced Z1? It has a 5-inch, Full HD display, encased in

a one-piece aluminum housing. Oh, and that 20.7-megapixel, f/2.0 camera that we already mentioned, along with a somewhat more conventional 2-megapixel snapper around the front. All of the above is kept safe from watery harm, with IP58-level certification.

What this effectively means is that Sony has taken its current flagship,

refreshed the processor, tightened a few nuts and bolts and surgically enhanced the camera. Cosmetically, the family heritage is strong. So much so, that without the original Xperia Z nearby for comparison, they are easily mistaken for one another. Sony tells us that it “believes that consumers want a flagship that’s good at everything,” and with some indisputably solid specifications across the board, it’s hard to argue that they haven’t at least reached for that goal. The Xperia Z1 is well-built, zippy and responsive, and seems to keep the best bits of the original. Add to that key updates we saw first in the Z Ultra and it becomes a tantalizing combination, that’s for sure. — *James Trew*



Click on product names to read full stories

DISTRO

09.06.13

BEST OF IFA 2013

OTHER SMARTPHONES

ACER
LIQUID S2

HTC DESIRE
601



Click on product names to read full stories



LAPTOPS, ULTRABOOKS & MORE

In keeping with current trends, manufacturers hit the show floor with touchscreens, multi-fold orientations and slimmed-down frames.



Click on product names to read full stories

DISTRO

09.06.13

BEST OF IFA 2013

LENOVO YOGA 2 PRO

PRICE: \$1,100+

AVAILABILITY:

October 2013

We think we can all agree the Lenovo Yoga has been long due for an upgrade. Well, Lenovo's finally giving us the upgrade we've been asking for, and if specs are any indication, it might have actually been worth the wait. The new Yoga 2 takes a big step up to a 13-inch, 3,200 x 1,800 touchscreen — putting it well ahead of its peers, most of which max out at 1,920 x 1,080 resolution.

As you'd expect, this new model runs on fourth-gen Intel Core processors with the battery life now rated at up to nine hours. Equally important: the new model measures 15.5mm thick and sheds about half a pound so that it now weighs a little over 3 pounds (3.06, to be exact, or 1.39kg).

Interestingly, though the Yoga 2 adds a backlit keyboard, it suffers from the same flaw as the original, which is that when you fold the screen back into tablet mode, you can feel your fingers pressing into the keys on the backside. (Like last time, the keyboard automatically disables in tablet mode).

Lenovo's also added some rubber gasketing on the edge of the display, so that it holds up a bit better when you put it upside down in Tent Mode. Speaking of Tent Mode, the Yoga Pro also includes a new software utility called Lenovo Picks, which automatically detects what position the Yoga is in, and shows a list of apps that might be relevant. Meanwhile, Phone Companion is an app you can use in laptop mode to copy things like documents and websites and send them to your phone in the form of a text message. Rounding out the list are Lenovo Photo Touch (photo re-touching), Lenovo Camera Man (photo filters) and Lenovo Chef (a recipe app with motion and voice control).

— Dana Wollman



SONY VAIO FLIP PC

PRICE: TBD

AVAILABILITY: TBD



Click on product
names to read
full stories

We knew a novel VAIO form factor was bound to be announced at IFA when Sony dropped an origami-inspired teaser video ahead of the show. Like the Lenovo IdeaPad Yoga, the VAIO Flip PC can be used in a variety of modes; the machine works as a standard clamshell laptop, but the display can also be collapsed down over the keyboard for use as a tablet. Finally, you can reverse the screen so it's facing outward, away from the keyboard, in "viewer mode." Of course, the Flip will be sold in 13-, 14- and 15-inch sizes.

Sony's made no secret about it: now more than ever, it's looking to make itself quite competitive with its PC offerings. All models sport a backlit keyboard, a 1,920 x 1,080 IPS display and a variety of Haswell processor options. Those perks are matched by an attractive package, including a diamond-cut VAIO logo and tasteful brushed aluminum featured on the Ultrabook's palm rest and lid. The real appeal here, though, is the VAIO



Flip's ability to, you know, flip — and Sony's come up with a clever switch system to do just that. Unlike on Lenovo's IdeaPad Yoga, the VAIO Flip PC's keyboard isn't exposed when it's in viewer mode. There's a learning curve inherent with any unconventional notebook like this, but the flipping mechanism feels reassuringly sturdy. — *Sarah Silbert*

DISTRO

09.06.13

BEST OF IFA 2013

OTHER LAPTOPS & ULTRABOOKS

**ASUS
ZENBOOK
UX301**

**ACER
ASPIRE
R7**

**ASUS
TRANSFORMER
BOOK T300**



Click on
product
names to
read full
stories



TABLETS, SUPER-SIZED SLATES & E-READERS

Given the outfit's track record for launching a whole slew of devices at once, it's no surprise that Samsung revealed a new 10.1-inch Note alongside slates from Acer, ASUS and Sony.



Click on product names to read full stories

DISTRO

09.06.13

BEST OF IFA 2013

SAMSUNG GALAXY NOTE 10.1 (2014 EDITION)

PRICE: TBD

AVAILABILITY: September 25th

With all the hubbub about the Samsung Galaxy Note 3 and the Galaxy Gear, any hype surrounding a new Galaxy Note tablet prior to IFA 2013 was severely downplayed. The new version of the tablet device, aptly dubbed the 2014 Edition, reflects the leather-clad design language of its smartphone companion in a much larger package. This edition is closer to the design language of the Note 3 than its own predecessor. It offers the same faux-leather matte material on the back, with stitching on the borders. Don't be fooled, however, by the chrome edges of the device: Samsung reps informed us that they are indeed a plastic build.

In our brief time with the device, we expectedly had no qualms with the snappy performance. Also, it shouldn't come as much of a surprise

that, unlike the Note 3, the 2014 edition doesn't come with a removable back cover nor replaceable battery. We don't want to spend too much time on the software because the enhancements we saw on the 2014 edition are exactly the same as they are on the Note 3. The Flipboard-style Magazine UI is just a swipe away and you'll have the chance to take advantage of Air Command and Multi Window enhancements among other features. Curiously, we noticed that the S Pen was a little more difficult to unsheathe from its holding place, much like the Note 3.

— Brad Molen and Zach Honig



SONY VAIO TAP 21:

PRICE: TBD

AVAILABILITY: TBD



Click on product
names to read
full stories

Sony's tabletop Windows 8 slate, the VAIO Tap 20, made its debut at last year's IFA, so it's only fitting that we're back in Berlin to meet the successor. Dubbed the VAIO Tap 21, the follow-up packs a slightly larger, 21.5-inch display, and its design is more sophisticated, to boot. In addition to boosting the PC's dimensions by an inch and a half, Sony's bumped up the touchscreen's resolution from 1,600 x 900 to a full 1,920 x 1,080. It's still an IPS panel, as the impressive viewing angles made clear in our hands-on time, and it still offers software programs

such as Family Paint to take advantage of the 10-point multi-touch.

What's more, the company says it made the Tap 21 50 percent thinner than its predecessor, and we're looking at about eight pounds versus 10. Processor options include Core i5 and Core i7 Haswell chips, and the Tap 21 will be available with an SSD or hybrid hard drive. Interestingly, though the Tap 21 is a far cry from "portable," Sony plans to sell a carrying bag. On the price front, all we're getting is "comparable with the Tap 20." That mobile desktop launched with an \$880 base price, so draw your own conclusions. — *Sarah Silbert and Dana Wollman*



DISTRO

09.06.13

BEST OF IFA 2013

OTHER TABLETS

**SONY
PRS-T3**

**ACER
ICONIA A3**

**ASUS MEMO
PAD 8 & 10**



Click on
product
names to
read full
stories



CAMERAS, ACTION CAMS & MORE

Sony's "lens cameras" weren't exactly shrouded in secrecy, but they were just the tip of the shutter button in terms of snapshooting and video capture at IFA this year.



Click on
product
names to
read full
stories

DISTRO

09.06.13

BEST OF IFA 2013

SONY DSC QX10 & QX100

PRICE: \$249 & \$499

AVAILABILITY: September 2013

The rumors, we're thrilled to see, are true. Sony's unique lens cameras are now official, and they're coming to a smartphone or tablet near you. Both cameras lack the display and controls of an ordinary point-and-shoot — instead, you'll pair your Android or iOS device with the camera via WiFi, and use that to adjust settings and frame each shot. Naturally, we expected lag to be a major issue here, but the feed was delayed by only a fraction of a second, and it was perfectly sufficient for this type of shooting. To get started, you'll power on the camera, connect to the device's ad-hoc access point,

launch the PlayMemories Mobile app and start shooting.

The DSC-QX10 is the "high-zoom" model, with a relatively compact 10x optic. That 18.2-megapixel model will ship in black or white, but it's specifically geared toward entry-level shooters, with mid-range optics and limited manual control. Advanced photographers are going to want to focus on the "quality" QX100, which features the same 1-inch, 20.2-megapixel sensor and 3.6x f/1.8-4.9 lens as the \$750 RX100 Mark II. With it, you'll have access to advanced modes like aperture or shutter priority, but Sony opted to exclude access to a full-manual mode, so you'll need to use exposure compensation to make any tweaks. — *Zach Honig*



SONY ACTION CAM

PRICE: \$300

AVAILABILITY:

September 2013

Sony has released camcorders and cameras for a variety of niches at IFA, including a new HD action cam, the HDR-AS30V. It's immediately noticeable that the second-gen model is smaller and lighter than the original, making it even less cumbersome when clipped

onto a helmet. The side features the same basic-info LCD with two selection buttons, so you'll still make need to make use of its onboard WiFi and a smartphone — or the new Live-View Remote (details in a bit) if you need a viewfinder.

You'll find stereo mics and a fixed Carl Zeiss lens at the front with a 170-degree viewing angle, though you'll only get a 120-degree field of view with SteadyShot enabled.

The new bits are essentially a backlit Exmor R CMOS sensor, GPS and NFC. Full HD videos can now be captured at 1080/60p, while 720/120p and 720/60p settings are available for slow-mo videos. As a bonus, it can also take 11.9-megapixel images and shoot at interval timing. Using Sony's PlayMemories Home app, you'll be able to sync up video from two of the new Action Cams, rotate the orientation of your clips and add overlays based on GPS data. To go alongside the recorder, Sony's introducing an optional, wearable Live-View Remote for \$150. The waterproof accessory attaches to your wrist and lets you control the camera and monitor your shots. — *Joe Pollicino*



Click on
product
names to
read full
stories

DISTRO

09.06.13

BEST OF IFA 2013

OTHER CAMERAS

**TOSHIBA
CAMILEO
X-SPORTS**

**SONY
HDR-MV1**



Click on
product
names to
read full
stories



WEARABLE TECH

Much like its companion, the Galaxy Note 3, Samsung's Galaxy Gear wasn't even close to being a well-kept secret. Luckily, it wasn't the only wearable to watch out for.



Click on
product
names to
read full
stories

DISTRO

09.06.13

BEST OF IFA 2013

SAMSUNG GALAXY GEAR

PRICE: \$299

AVAILABILITY: September 25th

The Galaxy Gear was hardly guarded with a high level of secrecy, but now the device is finally official. The centerpiece is a 320 x 320-pixel, 1.63-inch AMOLED touchscreen. The Gear includes an 800MHz processor, a 315mAh battery, and — in a somewhat surprising twist — a BSI sensor with autofocus lens mounted in the wrist strap that's tasked with capturing 1.9-megapixel stills and 10-second video clips at 720p, 640 x 640 or VGA resolution with sound.



Like other smartwatches we've seen and reviewed, such as the monochrome Pebble, the Gear organizes apps, watch faces and other pages in swappable cards. We haven't been blown away by any smartwatch's performance, and that's much the case here. The Gear feels awfully sluggish, whether you're launching an app such as Evernote or Path, or swiping down from the home screen to activate the camera. The interface also feels a bit clunky and unpolished at times, as does the S Voice feature.

As we've come to expect with many first-generation devices, the Gear has quite a few shortcomings, some of

which likely have yet to come to light. Perhaps the biggest setback, however, is that the Galaxy Gear is only compatible with the Note 3 and the new Note 10.1, and while it will likely work with the GS4 once that device gets an Android 4.3 update, we don't expect that it'll ever function with non-Samsung smartphones and tablets. — *Zach Honig and Brad Molen*



SONY HMZ-T3

PRICE: TBD

AVAILABILITY: October 2013 (Japan)

Ahead of Sony's own IFA press event, it announced its latest head-mounted display. The HMZ-T3 is the third iteration and while there's no substitutional-reality function (or camera), the company's made some important improvements that could tip the balance for those concerned about committing the requisite funds. It'll come in a new "wireless" iteration — we'll explain why we used those quote marks a little later — while Sony has

also improved the clarity of its dual OLED displays through lens and software adjustments.

Our favorite new feature, however, is the ability to plug in Android (presumably Xperia) devices with micro-HDMI / MHL connectivity. The device, via the battery pack, has ports for both full-size and micro-HDMI



cables, and given the current influx of HD-capable smartphones, it's a pretty pervasive way to use it. Further feedback has also resulted in Sony adjusting the headbands and re-balancing the weighting of the headset. The front headrest has been further expanded, increasing the comfort during extended sessions, although we feel it's still a little too heavy. Now about that wireless model. While the headset's new Wireless HD mode can stream content to the unit without any picture quality degradation up to seven meters away, the battery unit (which receives the signal) is still tethered to the headset and it takes up around the same space as two smartphones, stacked. — *Mat Smith*



Click on product names to read full stories

DISTRO

09.06.13

BEST OF IFA 2013

OTHER WEARABLE TECH:

SONY
SMARTWATCH
2



Click on product names to read full stories



ESC

DISTRO
09.06.13

VISUALIZED

ANDROID 4.4
'KITKAT'



ESC

DISTRO
09.06.13

VISUALIZED

ANDROID 4.4 'KITKAT'

Google's always shown a bit of a sweet tooth when naming its Android OSes. It all began with 1.5 Cupcake in 2009 and proceeded down the alphabet with each successive release; the most recent being Jelly Bean (4.1-4.3). Google's remained, for the most part, brand-generic in its choices until Tuesday's announcement that Android 4.4 shall henceforth be known as KitKat, after the candy bar — a Google snack favorite — of the same name. The digitally progressive Nestle company welcomed the idea and will be issuing 50 million robot-branded KitKat bars as part of the promotion. The Android offices in Mountain View, Calif., celebrated the newest addition to its confectionary collection as it always has, by erecting an iconic statue of the OS mascot on its front lawn.



PHILIP GELATT



**THE AUTHOR AND *EUROPA REPORT* SCREENWRITER
on convenient fact-checking
and rewind dreams for broken
smartphone screens**

What gadget do you depend on most?

I feel like everyone must say their phone, but it's totally my Galaxy S III. I use that thing for everything.

Which do you look back upon most fondly?

Totally random — the Atari Lynx. Because it had awesome games and it felt like you were holding a real meaty chunk of technology in your hands. Also *Xenophobe*.

Which company does the most to push the industry?

Not sure I'm qualified on this one





The Atari Lynx handheld game console was released in 1989, which put it in direct competition with the popular Game Boy.

to say, but if I had to venture a guess, I'd say Google.

What is your operating system of choice?

OS X. I used to be a PC person, years and years ago, but when I switched, I never went back. But I do miss PC gaming dearly.

What are your favorite gadget names?

I don't have any — I feel like they're dangerously close to becoming like drug names.

What are your least favorite?

Droid. Because every time I hear it or say it I can feel the unblinking eye of Lucasfilm / Disney upon me.

Which app do you depend on most?

Not sure it counts as an app, but I use this writing program called Scrivener a lot — to do outlines and organize thoughts. Also Scapple, which is so simple as

to seem silly, but is actually super useful.

What traits do you most deplore in a smartphone?

I guess I get mad that I still have to use it as a phone at all. I'd rather just use it as an internet device. But that's less to do with the smartphone and more to do with my own social anxieties.

Which do you most admire?

The simplest traits are the ones I most admire: that it fits in my pocket, that it can do so much.

What is your idea of the perfect device?

Psh. The pursuit of perfection is a fool's quest!

What is your earliest gadget memory?

Honestly, it's complaining about how some *Bond* movies didn't have enough of them. And then, my first





A screenshot [above] and movie poster from the 2013 sci-fi thriller, *Europa Report*.



Game Boy — I had one those before I was allowed to have a Nintendo — and that little thing just felt like it could do anything.

What technological advancement do you most admire?

We got into space! And that was totally awesome.

Which do you most despise?

Does the ability to comment anonymously on the internet count as an advancement? I feel like that's one of the worst aspects of the modern age.

What fault are you most tolerant of in a gadget?

I don't care much how a thing looks as long as it works well.

Which are you most intolerant of?

If it breaks before I feel like I got the proper amount of usage out of it. That drives me nuts, because we all know I never keep receipts.

When has your smartphone been of the most help?

I use it to constantly fact-check during conversations. I think it drives everyone else around me completely insane, but I consider that incredibly helpful.

What device do you covet most?

I've never had an iPhone. I don't necessarily covet it, but I do think that maybe someday I'd like to have one of those.

If you could change one thing about your phone what would it be?

That I dropped it and cracked the screen. Sigh.


What does being connected mean to you?

Communication, basically. Most of my friends and co-workers live in other cities, other states. Being connected means that they get to stay co-workers and friends.

When are you least likely to reply to an email?

When I don't have anything useful to say or add, then I try to stay quiet.

When did you last disconnect?

Other than when I'm asleep? I don't know. I keep telling myself I'll take a week or two off of the internet but I've never done it. 



IN REAL LIFE is an ongoing feature where we talk about the gadgets, apps and toys we're using in real life.

JBL PLAYUP SPEAKER

I CAN'T BE THE ONLY one who follows up a significant purchase with a bit of accessorizing. And so it was with my recent acquisition of a banana yellow Lumia 1020; shortly after that purchase, I caught wind of a discount on JBL's Nokia-branded PlayUp speakers (normally around \$150) and decided to take one for a spin.

Despite the Nokia branding on the front and the Lumia-themed

colors, JBL's PlayUp worked with every Bluetooth-equipped audio source I tried (Lumia 1020, Nexus 4, iPad mini, MacBook Air). My NFC-toting Lumia had little trouble connecting with the PlayUp once I found exactly where on my phone to tap. (Pro tip: practice this before you try wowing loved ones with your NFC magic.) Beyond that, a removable bottom panel houses an audio cable



to use with the PlayUp's 3.5mm jack. A replaceable, rechargeable battery also hides behind that panel and powers the speaker for a claimed 10 hours.

The unit itself is shaped a bit like the bottom half of a 2-liter bottle of Coke, with a large speaker grille covering the top. Sadly, my particular unit arrived with a small dent in said grille, but the device appeared otherwise unmarred. Peer into that large grille and you'll spot a trio of upward-facing drivers, providing what JBL bills as "room-filling, 360-degree sound."

"The unit itself is shaped a bit like the bottom half of a 2-liter bottle of Coke, with a large speaker grille covering the top."

As it turns out, JBL's claims aren't far off the mark. Even short of full blast, the PlayUp capably produced room-filling, though not quite room-shaking sound. It had no trouble supplying audio to every corner of the largest rooms in our house and kept up outdoors as well. A bass port on the side helped keep lower tones from becoming a muddled mess, but the PlayUp obviously can't compete with a dedicated subwoofer. That said, this little speaker handled everything from the *Pacific Rim* soundtrack to Daft Punk to Metallica's notoriously compressed *Death Magnetic*. Unfortunately, the PlayUp lacks the nifty pairing option seen on the earlier Play 360 speakers, which enabled two devices to connect for stereo sound. Oh, and that "10-hour" claim? Spot on, so far. After just over 10 hours of elapsed playback, a little light began flashing to warn me the party would soon be over. After a quick recharge with the supplied micro-USB / power adapter, I'm ready to rock some more. — Philip Palermo



BLACKBERRY Q5 ON TELUS



ONE OF THE KNOCKS against the BlackBerry Q5 has been its relatively high off-contract price — a big obstacle in countries where prepaid service is common. However, it's now on sale at larger Canadian carriers for an easier-to-swallow price of \$50 with a two-year contract. With that in mind, I've been trying the Q5 on Telus to see whether I can recommend the mid-range QWERTY phone when it's discounted through a steep subsidy.

In some ways, I've enjoyed using it. Although my colleague Dan ragged on the Q5 keyboard's low quality, I don't mind it; to me, the keys have that same reassuringly clicky feel as better Curve models of years past. We're in agreement regarding the above-average battery life, at least. Where I couldn't even get through an afternoon with the Q10 when it launched, the Q5 really can last all day with moderate use on Telus' LTE network. Friends with Q10s say that the battery life gap has narrowed through software updates, but I'd be tempted to pick the Q5 over the Q10 just because I know it would still carry a

charge by the evening.

With that said, it's clear that the Q5 is a lower-end device. It's chunky, and it isn't quite as reassuring to grip as the Q10. The 5-megapixel camera performs well enough in bright light, but it's otherwise nothing to write home about. And while the 3.1-inch AMOLED screen is vibrant, its size and square aspect ratio are frustrating for those who love movies and social networking. For that reason, I'd rather have the Z10 — it gives app content the room it needs to breathe, and BlackBerry's touchscreen keyboard is good enough that I don't miss hardware keys at all.

In isolation, the Q5 feels worth the \$50 contract price. However, it's a much tougher sell when you see what else is on offer. As of this writing, bigger Canadian carriers are selling the more capable Z10 for that same \$50. On Telus, you can buy a Nexus 4 or Galaxy S III for less; hop over to Bell and you can pick up the Q10 for \$80. Fans of hardware keyboards will still want to give the Q5 a close look, but it really ought to be free on contract given its competition. — *Jon Fingas*



The week that was in 140 characters or less

Tiny Tech, Branding Ubiquity and a Sweet Deal

DISTRO
09.06.13

ESC

REHASHED

@inafried

Waiting for
galaxy gear note
1.3 with a teeny
tiny stylus,
personally.

@darrenmurph

Nokia, you can't troll the world's leading smartphone manufacturer when you're rocking 1.2%.
Try again later.

@JoannaStern

My cab driver says he is waiting for the Apple iWatch before he decides to buy the Samsung iWatch.

@nickbilton

New Yahoo logo is a meld of the Optima font, a 1950s humanist sans-serif designed by Hermann Zapf, and a drunk guy scribbling on a napkin.

@SamColes

I suppose
Google's gotta
make some
money with
Android
sometime.
#KitKat

THE STRIP

BY SAM HENDERSON



DISTRO
09.06.13

ESC

TIME
MACHINE

WHAT IS THIS?
TOUCH TO FIND OUT



REIDAR HAHN / FERMILAB



DISTRO
09.06.13

ESC

TIME
MACHINE

COCKROFT-WALTON PRE-ACCELERATOR

WHAT IS THIS?
TOUCH TO FIND OUT

» In 1932, physicists John Cockcroft and Ernest Walton teamed up to design and build a device that would help propel particles at enormous velocities in order to expose details about the atomic structure of matter. Their Cockcroft-Walton generator, built in Cambridge, UK, powered the first effort to artificially split an atom and had the honor of initially confirming Einstein's theory, $E=mc^2$. Many particle accelerator facilities use several iterative stages in order to get particles up to the maximum desired speeds. For years, Fermilab used this generator (ca. 1960), which was based on the Cockcroft-Walton design, as its first-stage accelerator. It ionized hydrogen gas and boosted the system's voltage, managing to get protons and electrons cruising with an energy of 750 keV, about 30 times that of a TV tube. In August 2012, after four decades of service, it was decommissioned and replaced by an RFQ system, which tackles the same duties, but at a fraction of the size and maintenance effort.





**Try an upgrade that can
actually save you \$500.**

**Switch to State Farm® and save
\$500* on auto insurance.**

Get A Quote ►

*Average annual per household savings based on a 2012 national survey of new policyholders who reported savings by switching to State Farm.



Executive Editor Marc Perton

Executive Editor, Distro Christopher Trout
Associate Editors, Distro Billy Steele, Jon Turi
Editorial Interns, Distro Landon Peck, Daniel Stegemiller
Editor-at-Large Darren Murph
Managing Editor Dana Wollman
Director of Media Brian Heater
Senior Associate Editors Don Melanson, Zach Honig, Richard Lai, Michael Gorman, Terrence O'Brien, Joseph Volpe, Ben Gilbert, Sarah Silbert
Associate Editors Joe Pollicino, Sean Buckley, Jon Fingas, Nicole Lee, Edgar Alvarez
Senior Mobile Editors Myriam Joire, Brad Molen
Associate Mobile Editors Sean Cooper, Zachary Lutz
Senior HD Editor Richard Lawler
Associate HD Editor Ben Drawbaugh
Associate Reviews Editor Melissa Grey
Contributing Editors Mariella Moon, Alexis Santos, Steve Dent, Jamie Rigg, Jason Hidalgo, Kevin Wong
Senior European Editor Sharif Sakr
Associate European Editors Mat Smith, James Trew, Daniel Cooper
Copy Editors Philip Palermo, Samuel Smith
Senior Columnists Joshua Fruhlinger, Ross Rubin, Brad Hill
Cartoonist Sam Henderson

AOL MAGCORE

Head of Ux and Design Jeremy LaCroix
Art Director Greg Grabowy
Designers Troy Dunham, Eve Binder, Susana Soares
Design Production Manager Peter Niceberg
Photographer Will Lipman

Product Manager Gabriel Giordani
Architect Scott Tury
Developers Mike Levine, Sudheer Agrawal

QA Joyce Wang, Amy Golliver

Sales Mandar Shinde

AOL, INC.

Chairman & CEO Tim Armstrong